

Policy and Procedure 8-22 Workplace Safety – Harvest Inspection Operations

Issued By: Bettina K. Ring, State Forester



Effective Date: April 1, 2017

Codes/Mandates: OSHA Standard 29 CFR 1910.266, Logging Operations focuses primarily on logging industry operation and the people that are involved in actual harvest operations (fellers, machine operators, etc.). VDOF activity on harvest sites, however, is limited to inspections, not operations. So, only those subsections of the standard that relate, in some way, to inspection type activities have been used to establish the VDOF harvest inspection safety procedures. The following subsections contain guidelines that are applicable to VDOF inspection duties:

- 29 CFR 1910.266 (h)(1) - tree harvesting
- 29 CFR 1910.266(i) - training requirements
- 29 CFR 1910.266 (d)(i) - personal protective equipment
- 29 CFR 1910.135(a)(1) – head protection

ANSI Z87.1-2003 and ANSI Z87.1-1996 “American National Standard Practice for Occupational and Educational Eye and Face Protection.”
ANSI Z89.1-2003 American National Standard for Personal Protection—Protective Headwear for Industrial Workers Requirements

References: N/A

Forms: N/A

CONTENTS

| | |
|---|----------|
| PURPOSE | 1 |
| POLICY | 2 |
| DEFINITIONS | 2 |
| PROCEDURES | 3 |
| Responsible Parties | 3 |
| Inspection of Standard Ground-Based Logging Operations | 3 |
| Inspection of Active Helicopter-Based Logging Operations | 4 |
| Inspection of Active Cable Logging Operations | 5 |
| Training | 5 |
| AUTHORITY | 6 |
| INTERPRETATION | 6 |

PURPOSE

Due to high injury and fatality rates, logging is a target industry for the Occupational Safety and Health Administration (OSHA). OSHA Standard 29 CFR 1901.266 institutes rigid safety standards for the logging industry is to help reduce injury rates. The purpose of this policy and procedure is to help prevent accidents and injuries from occurring on logging jobs resulting from VDOF inspections, and to ensure that VDOF staff is in compliance with OSHA standards while on site so that we do not jeopardize operator compliance requirements.

POLICY

It is the position of VDOF management that all harvest inspections be conducted in accordance with OSHA standards and that all inspectors will conform to the Agency policy. Expressly, before an employee conducts a harvest inspection, he/she must participate in an on-the-job training program that adequately prepares him/her to conduct such an inspection safely. This will include training on potentially dangerous conditions, site awareness, personal protective equipment and communication guidelines. No VDOF employee shall conduct a harvest inspection unless they have satisfactorily completed the required training and demonstrated proper knowledge of the safety requirements set forth in this policy.

DEFINITIONS

“Active harvest operations” means a logging operation that is active. A logging operation is considered active when logging equipment is on the site and in operation. An inactive site becomes active the moment a piece of equipment is energized.

“Approved hard hat” means a hard hat that is in good working condition and complies with performance guidelines in the ANSI Z89.1-1997, American National Standard for Personal Protection – Protective Headwear for Industrial Workers Requirements, and are clearly marked in accordance with ANSI requirements. Minimally, all hard hats issued for use on logging site inspections will be ANSI Type I (top only impact protection), Class C (no electrical protection). It is highly recommended that Type II (top and lateral impact protection) be issued with an upgrade to at least Class G (electrical insulation rating of 2200 volts).

“Approved safety glasses” means safety glasses or goggles that are rated as high impact by the American National Standards Institute (ANSI), provide side protection from hazards associated with flying objects, and are clearly marked as ANSI approved for high impact use under one of the descriptions below. Detachable side protectors (e.g., clip-on or slide-on side shields) are acceptable.

Currently, OSHA requires (29 CFR 1910.133) that eye protectors comply with the 1989 version of the ANSI Z87.1 “American National Standard Practice for Occupational and Educational Eye and Face Protection.” Eye protection devices now in use may continue to be used. They must be marked with AOSZ89+.

Purchases of protective eyewear beginning July 1, 2007 will comply with ANSI Z87.1-2003, “American National Standard Practice for Occupational and Educational Eye and Face Protection” and be distinctly marked to facilitate identification of such (AOSZ03+).

“Cable yarding” is defined as the movement of felled trees or logs from the area where they are felled to a landing on a system composed of a cables suspended from spars and/or towers. The trees or logs may be either dragged across the ground on the cable or carried while suspended from the cable.

“Designated area” means all areas within a logging site including the deck area; loading and unloading areas; skidding and felling operations; topping and limbing areas, and any other area designated by the supervisor or crew chief.

“VDOF staff” consists of employees, visitors accompanying employees, trainees and any other person on site that is associated with VDOF business.

“Harvesting activity or logging operation” includes all operations associated with felling and moving trees and logs from the stump to the point of delivery, such as, but not limited to, felling, limbing, bucking, debarking, chipping, yarding, loading and unloading.

“Machinery” means a piece of stationary or mobile equipment having a self-contained power plant that is operated off-road and used for the processing and/or movement of material. Machines include, but are not limited to, tractors, skidders, front-end loaders, scrapers, graders, bulldozers, swing yarders, log stackers, log loaders, chainsaws and mechanical felling devices, such as tree shears and feller-bunchers.

PROCEDURES

Responsible Parties

VDOF water quality engineers are responsible for providing harvest inspection on-the-job training for new employees; reviewing issues regarding harvest site safety and makes all recommendations concerning such to the agency safety officer, and work in cooperation with the unit accident investigator to investigate and review accidents/incidents involving VDOF staff on harvest inspections in their assigned work area.

Agency safety officer is responsible for guiding the development of the overall harvest inspection safety program. This includes the safety procedures, training component and record keeping elements.

Supervisors are responsible for ensuring that their staff is in compliance with training requirements before conducting harvest inspections and that their employees follow the safety procedures set out in this policy. They are also responsible for coordinating training and mentoring for new employees.

Harvest inspectors are responsible for adhering to the training requirements and safety procedures as outlined in this policy.

Inspection of Standard Ground-Based Logging Operations

- ◆ VDOF staff will obtain harvest site safety training prior to conducting a harvest inspection or visiting an active logging site.
 - Exception: VDOF staff, visitors, and trainees may accompany trained personnel on an active logging job as long as they remain within audible distance.
- ◆ Each new employee must demonstrate to their water quality engineer, or assigned on-the-job trainer, that they are able to safely perform their inspection duties.
- ◆ VDOF staff that performs harvest site inspections shall have a current first aid and CPR certificate.
- ◆ Employees who encounter logging operation systems and equipment that they are unfamiliar with will check in with the operator before proceeding past the logging deck as to what precautions they should take.
- ◆ No VDOF staff shall assist with any part of the logging operation, operate or ride on any of the machinery, or handle hand or portable powered tools, or blasting agents.
- ◆ If the employee has no means of transmitting a communications (i.e., no cell or radio service) to an outside party while on a logging operation, they will leave notification of their location with a second party prior to arrival at the site. It is advisable that the employee also notify the receiving party of their safe return to their vehicle when transmission is restored.
- ◆ VDOF vehicles will be parked well away from any production activity and in an area that does not impede operator movement. Before moving a vehicle, make certain that operators are out of your path of travel.
- ◆ Upon arrival to a harvest site, inspectors will ensure that their presence is known by the logging personnel. Use hand and/or audible signals or a communication device as needed to gain their attention.
- ◆ Inspectors will situate themselves so that they do not create a hazard for operators – if possible, work from a position or location that is within visible or audible contact with operators; always work in-the-clear of the active work zone.
- ◆ The following personal protective equipment shall be worn on active harvest operations at all times by VDOF inspectors, visitors, and trainees.
 - Approved agency-issued hard hat in good working condition – components should be checked before use for signs of dents, cracks, penetration and any damage due to impact, rough treatment, UV damage (the hat will lose its glossy finish and eventually take on a chalky appearance; further degradation could cause the shell to

actually start flaking away) or normal wear and tear. Any hat that fails the visual inspection should be removed from service.

- Approved safety glasses
- High visibility vest
- Boots must cover and support the ankle, preferably leather with eight inch rise
- Cell phone or radio if operable in the area (optional for visitor/trainees)
- The following personal protective equipment will be worn on in-active harvest operations at all times by VDOF inspectors, visitors and trainees. Should an inactive operation become active while on site, the PPE listed above takes precedence.
 - Cell phone or radio if operable in the area (optional for visitor/trainees)
 - Approved hard hat in good working condition (see above) shall be worn when there is overhead canopy remaining in the inspection zone that could present the possibility for overhead fall hazards (limbs or tops dislodging and falling).
 - Boots must cover and support the ankle, preferably leather with eight inch rise
- ◆ Employees shall maintain a minimum of two tree-lengths (of the height of the trees being processed) from all harvesting activity until the machine/equipment operator has acknowledged that it is safe to come closer.
- ◆ For purposes of hearing protection, employees will maintain a distance away from logging machines whereas the noise does not drown out normal conversation levels. This typically equivocates to a distance of approximately 300 feet from felling and bunching machinery or where normal to slightly elevated voices can be used talk. This rule of thumb will keep employees within safe noise exposure rates of less than 85 db.
- ◆ When a spring pole or other tree under stress is cut, no employee shall be closer than two trees lengths when the stress is released.
- ◆ Employees will terminate work and move to a place of safety when environmental conditions, such as but not limited to, electrical storms; strong winds which may affect the fall of a tree; heavy rain or snow; extreme cold; dense fog; fires; mudslides, and darkness, create a hazard for the employee in the performance of the job.
- ◆ During inspections, employees will avoid other hazards, such as wells, utility lines, holes, leaning trees, dead tops, hanging limbs, etc.
- ◆ Employees will document any threats of violence or harassing/aggressive behavior and report them to a supervisor as soon as possible.

Inspection of Active Helicopter-Based Logging Operations

Harvest Inspectors shall follow all applicable procedures for standard ground based logging operations in addition to the following procedures below when working at a helicopter-based logging operation.

- ◆ Remain a minimum of 75 feet away from a helicopter when the rotor blades are turning. In the event that you must approach the craft, wait until the blades have completely stopped and approach only upon signal from the pilot.
- ◆ If required to approach a landed helicopter with blades that are rotating, heed the following measures:
 - Remain in full view of the pilot at all times and wait for acknowledgement and direction from him/her before approaching or leaving the aircraft.
 - Walk in a crouched position when approaching or leaving the aircraft as the rotor blades can come within five feet of the ground.
 - Never approach or depart uphill from the helicopter.
 - Never approach or depart from the rear of the craft or go toward the tail portion.
 - Do not go under the tail to get from one side of the aircraft to the other. Walk only around the front of the aircraft.

- ◆ Stay clear of drop zones, log loading zones and aerial entry and exist paths to those zones. Not only do suspended loads themselves constitute a hazard in these areas, but as those loads are lifted through the canopy, limbs or tops can be broken off of other trees that later dislodge and fall to the ground. Entire trees themselves can even topple. Similar hazards can develop due to the rotor wash over these flight areas as well.
- ◆ If observing the drop operation, stay within safe zones designated by the contractor. Safe zones are specifically designed and located around the landing to provide safe areas for ground personnel to work. Safe zones also provide protection in the event that the helicopter experiences an emergency and must set down at the landing.
- ◆ Employees shall not work under hovering aircraft or any suspended load.
- ◆ Hard hats will be secured by chinstraps while on site to avoid blow off by downdrafts.

Inspection of Active Cable Logging Operations

The movement of felled trees during a cable yarding operation can present hazards that VDOF employees are not used to encountering due to the infrequent use of these types of systems in Virginia. These hazards are the result of suspended loads as well as the actual cabling equipment used to tow the loads.

Harvest Inspectors shall follow all applicable procedures for standard ground based logging operations in addition to the following procedures below when working at a cable logging operation.

- ◆ Stay clear of all active corridors where trees are being felled and yarded.
- ◆ Inspect wooded areas adjacent to active corridors only if there is suspected soil disturbance.
- ◆ When at the landing, do not stand close by or beneath the mainline, beneath the guylines opposing the turn as they could break or beneath the bight formed by the running yarding lines.
- ◆ Stay clear of incoming log loads (turns) at the landing area – logs can jill-poke (or be driven out of a pile), upend or strike logs already in the landing and turn them loose.
- ◆ While in the landing area, stay within designated safe areas, outside the work circle and visible to the machine operator.
- ◆ Always work uphill from turns or log piles.

Training

- ◆ All VDOF employees who perform harvest site inspections, or visit active logging operations, are required to obtain on-the-job (OJT) safety training prior to any such assignment. The exception is VDOF staff, visitors or trainees who are accompanying trained personnel on an active logging job – as long as they remain within audible distance. OJT must expose trainees to the following elements:
 - Familiarization with the machines and vehicles that are used on logging operations including the hazards associated with each and the measures and work practices that are used to prevent or control those hazards.
 - Recognition of safety and health hazards associated with the employee’s job as inspector (i.e., danger trees, poisonous plants/animals/insects, tripping hazards, noise, in-adequate communications capability, dealing with difficult people, etc.), including the measures and work practices that are used to prevent or control those hazards (i.e., positioning in the work area, PPE, workplace violence prevention, walking on rough and uneven surfaces, etc.)
 - Agency specific guidelines and protocols regarding harvest site inspections. In this part of the training, employees will become thoroughly acquainted with the procedures contained in the VDOF Harvest Inspection Safety Policy.
- ◆ It is also highly suggested that new inspectors also take SHARP Logger safety training.

- ◆ Employees who have received qualified training, as documented by a regional water quality engineer or supervisor, shall not be required to be retrained unless:
 - There are changes in the industry that necessitate new procedures, practices or work controls, or
 - The employee has an accident or near miss.
- ◆ Trainees and mentors will document on-the-job training in their time accounting records.

AUTHORITY

This policy and procedure is issued by the Virginia state forester.

INTERPRETATION

The director of human resources and agency safety officer are responsible for the interpretation of this policy and procedure.